Public Policy and Research Agenda

Organizational Silence and Hidden Threats to Patient Safety

Kerm Henriksen and Elizabeth Dayton

Organizational silence refers to a collective-level phenomenon of saying or doing very little in response to significant problems that face an organization. The paper focuses on some of the less obvious factors contributing to organizational silence that can serve as threats to patient safety. Converging areas of research from the cognitive, social, and organizational sciences and the study of sociotechnical systems help to identify some of the underlying factors that serve to shape and sustain organizational silence. These factors have been organized under three levels of analysis: (1) individual factors, including the availability heuristic, self-serving bias, and the status quo trap; (2) social factors, including conformity, diffusion of responsibility, and microclimates of distrust; and (3) organizational factors, including unchallenged beliefs, the good provider fallacy, and neglect of the interdependencies. Finally, a new role for health care leaders and managers is envisioned. It is one that places high value on understanding system complexity and does not take comfort in organizational silence.

Key Words. Organizational silence, high reliability organizations, patient safety, organizational learning, communication

Some 30 years ago an article appeared in the organizational management literature where the author described a 106-mile family trip in an unair-conditioned Buick taken one very hot Sunday afternoon across a godforsaken desert to eat an indigestible meal in a hole-in-the-wall cafeteria in Abilene, Texas. Upon return home, exhausted family members discovered that no one really wanted to take the trip. They only went along to satisfy others in the family, and they would have preferred to stay home and sip cold lemonade on

the back porch. Since its debut, students of organizations and management have come to learn that the inability to manage agreement, not the inability to manage conflict, is a major form of organizational dysfunctionality in what has been coined the Abilene paradox (Harvey 1974).

How is it that members of organizations, members of health care organizations in particular, will do things collectively that they would not do as individuals? What is it about an organization's structure and processes that undermine its members' ability to honestly and faithfully communicate their concerns and beliefs? When open and candid communication is impaired or silence is interpreted as consent, it is easy to see how collective reality can be misperceived. The consequence is that organizations take action or fail to take action in contradiction to what is intended.

More recently, *organizational silence* is the term used to refer to the collective-level phenomenon of doing or saying very little in response to significant problems or issues facing an organization or industry (Morrison and Milliken 2000). Both inside and outside of health care, the price of silence carries a heavy toll (Millenson 2003; Perlow and Williams 2003). In a recent study, fewer than 10 percent of physicians, nurses, and clinical staff directly confronted their colleagues when they became aware of poor clinical judgment or shortcuts that could cause harm. One in five physicians said they have seen harm come to patients as a result (Maxfield et al. 2005). Not only were nurses reluctant to speak up and confront doctors and other nurses, but doctors also rarely spoke up with respect to problems with nurses. Health care providers cited lack of confidence, concerns about the effects of their involvement, and fear of retaliation as reasons for not confronting colleagues.

One cannot address what does not get acknowledged and brought out into the open. The irony is that out of deference to existing authority gradients and a desire to maintain harmonious working relationships with colleagues, providers suppress their concerns about doing the right thing, and further distance themselves from having meaningful discussions about practices that will ensure safe and high quality care. Hart and Hazelgrove (2001) use the term *cultural censorship* to describe the duplicitous side of organizational life where untoward events paradoxically are simultaneously recognized yet concealed, where a lack of consensus as to the contributing factors of an adverse

Address correspondence to Kerm Henriksen, Ph.D., Agency for Healthcare Research and Quality, Department of Health and Human Services, 540 Gaither Road, Rockville, MD 20850. Elizabeth Dayton, M.A., is with the Agency for Healthcare Research and Quality, Department of Health and Human Services, 540 Gaither Road, Rockville, MD 20850.

event provides a convenient cloak for assigning it to the expected risks of medical practice, and where implicit bonds of transgression are formed and become culturally acceptable with respect to questionable practices that are shared by providers as a way of getting things done. Fear of personal implication in the shared wrong doing or questionable practice serves to maintain the organizational silence.

In a similar vein, Weick (2002) uses the term *consensual neglect* to refer to the tendency of organizational decision makers to tacitly ignore many of the unexpected events that are encountered in order to achieve unity of purpose and act as a single entity. Disruptive and politically incorrect issues are ignored, overly simplified, or become homogenized into more acceptable terms. In contrast to the undesirable consequences that result from silence, high reliability organizations are characterized by their preoccupation with failure and by their reluctance to simplify interpretations of untoward events (Weick and Sutcliffe 2001).

In addition to a fear of retaliation, an inbred cultural censorship, and a desire to maintain harmonious working relationships, the present paper focuses on some of the less obvious factors contributing to organizational silence that can serve as threats to patient safety. To date, the role that cognitive, social and organizational variables play in influencing adverse medical events is not widely understood. However, converging areas of research from the cognitive, social, and organizational sciences and the study of sociotechnical systems help to identify some of the underlying factors that serve to shape and sustain organizational silence. Deserving a closer examination, these factors have been organized under three levels of analysis: individual, social, and organizational.

INDIVIDUAL FACTORS

While the active errors that humans make may appear to have a random quality, many of these errors occur in systematic and predictable ways. Many of these predictable errors stem from the uncritical use of heuristics (i.e., rules of thumb) and self-assessments that lead to biased decision making in the conduct of every day affairs. Quite noteworthy in this regard are the availability heuristic, the self-serving bias, and the status quo trap. While these three areas of individual vulnerability by no means exhaust the possible set that could be discussed, they are selected here because of their potential influence on the quality and safety of care received in a wide array of health care delivery settings.

Availability Heuristic

The *To Err Is Human* (Institute of Medicine 1999) report played a pivotal role in raising awareness of the prevalence of medical error in U.S. health care delivery. Yet a 2002 study found that only 5 percent of physicians and 6 percent of the public identified medical error as one of most serious health care problems (Blendon et al. 2002). Because of the relatively small number of preventable deaths and serious adverse events at any individual institution as well as a general under-reporting of such events, many providers do not see the national patient safety problem as relevant to their institutions. The availability heuristic helps explain in part why the problem is overlooked. Tversky and Kahneman (1973) have shown that individuals judge the frequency of an event based on how easily available it is for recall. Providers, like other people, judge certain events to be frequent or infrequent based on how easily they can recall specific examples of the event. If relatively infrequent events that bring harm to patients go unreported and are not openly discussed, they remain unavailable and thus it is not surprising when providers report that they do not believe that X, Y, or Z is a problem at their institutions.

At the same time, infrequent events that are vivid, that carry strong emotional impact because of their tragic nature, or that have occurred recently are more available for recall. In fact, these infrequent but more highly available events such as wrong site surgery are likely to be overestimated. Likewise, organizational silence regarding infrequent events can be countered by increasing the availability of the events. Because of our susceptibility to vividness and recency effects (i.e., better recall for events that have occurred recently), they can be used to our advantage when we want to keep the spotlight on events that might otherwise go unnoticed. Storytelling is one method for doing this. Any retelling or discussion of a horrific event, independent of its actual likelihood, will increase the salience of the event and the perceived risk. Given that humans not only err, but that error occurs in certain systematic and predictable ways, it is important to fully recognize the purpose for which this knowledge can be used. Knowledge of cognitive heuristics and biases can be used for both laudable goals of increasing awareness of patient safety issues and for not so laudable purposes.

Self-Serving Bias

When good fortune befalls individuals, they somehow feel that they have deserved the good fortune and that it is justified. When bad fortune befalls others, an inkling of a suspicion may be harbored that maybe they have

deserved it. Further evidence of a self-serving bias can be found in a number of "above average" studies where high majorities of people have maintained they are above average in intelligence (Wylie 1979), driving ability (Guerin 1994), and in ethics and performance at work (Brenner and Molander 1977; Heady and Wearing 1987) while being oblivious to the 50 percent of the population that falls on the other side of the bell curve. Very few people glorify in or even acknowledge being "below average" as evidenced by drivers who rate themselves as "above average" even after an automobile accident. When everyone assesses their performance as "above average," there is little motivation to discuss issues and work toward improvement. Studies have shown that individuals are particularly likely to self-bias when they are deeply engaged in an activity, when they feel responsible for the outcome, and when they are visible in their activity (Weary 1978, 1980; Weary et al. 1982)— characteristics that apply to most clinical settings.

Another form of self-serving bias is known as *attribution error*. In brief, individuals make dispositional attributions for their successes and situational attributions for their failures (Nisbett and Ross 1980). For example, if a ventilated patient under a provider's care escapes developing ventilator-associated pneumonia (VAP), the provider may likely attribute the favorable outcome to his or her own diligent and relentless efforts in making sure the bed-head is elevated at 30° and allowing periods of unventilated breathing. However, if the patient comes down with VAP, the provider may more likely attribute causality to the many other caregivers and factors beyond his or her control. After all, one cannot be responsible for everything that happens. The problem, of course, is that people are perpetuating a falsehood when they minimize their role in adverse events and exaggerate their role in successful events. If allowed to go unchecked, meaningful discussions on significant patient safety issues go unstated and organizational silence reigns.

While a systems approach to patient safety focuses on situational factors and latent conditions (Reason 1990, 1997), individual accountability is in no way relegated to lesser importance. Even in the best designed, most fault tolerant systems, individuals do foolish things and commit preventable harmful errors. In a *just culture*, individuals are still accountable for their own behavior and grossly negligent behavior is subject to disciplinary action, even though the intent is to create an atmosphere where individuals feel safe to openly report and learn from unintended mistakes (Marx 2001). When it comes to self-serving bias and attribution error, forewarned is forearmed. One way of fostering individual accountability is to be aware of the operation of self-serving bias and correct it when it occurs. Another way to improve the

subjective lens through which we evaluate ourselves is with prompt, objective feedback that is difficult to deny (Lichtenstein and Fischhoff 1980). Indeed, when physicians are confronted with data that demonstrate their performance is below that of their peers, the typical response is to work to improve their performance (Leape 2004).

The Status Quo Trap

Regardless of the particular industry, members of organizations display a strong tendency to perpetuate the status quo. Whether it is adopting a new clinical process, designing a new product, or managing one's portfolio of mutual funds, it is very difficult to break away from the seemingly magnetic pull of the status quo. Maintaining the status quo is comfortable and requires no further action. Breaking away and taking a different course of action requires decision making, uncertainty, doubt, and renewed responsibility. As a consequence, it is easy to find reasons to do nothing; doing nothing and remaining silent puts individuals at less psychological risk (Hammond, Keeney, and Raiffa 1998). Like many industries, the sins of commission in health care carry a heavier penalty than do the sins of omission, and hence maintaining the same course trumps striking out in a new direction. It is interesting to note that individuals remember what they have done better than actions they forgot to take or chose not to take (Ross and Sicoly 1979; Ross, McFarland, and Fletcher 1981). Patient safety events that involve the omission of behavior are less likely to be recalled than events that involve a wrong action and this further silences discussion of precursors to patient safety events.

At the same time, it can be argued that not dwelling on unanticipated events serves as a coping mechanism that helps clinicians manage the personal toll these events take. Expressions such as "you've got to move on" and "you can't let things get to you" perhaps reflect a way of containing these events while needing to move forward and help other patients. If this is so, it is somewhat disquieting that coping mechanisms that psychologically serve to protect the individual also serve to maintain the status quo, and in return, may impede organizational efforts to improve patient safety.

Given a measure of comfort and complacency that maintaining the status quo provides, many individuals are reluctant to consider other alternatives or be even aware that other alternatives exist. However, explicit recognition and examination of other alternatives serve as a countermeasure to the status quo trap. We need to ask ourselves would we select the status quo alternative from a set of alternatives if it were not the status quo? For example, would

we willingly select the "see-one, do-one, teach-one" method of training surgical residents if it were not the status quo and other alternatives such as a structured, performance-based method of training incorporating simulation were among the set of alternatives? Defenders of the status quo frequently cite the cost and effort associated with making a change while failing to recognize there are costs and missed opportunities associated with maintaining the status quo.

SOCIAL FACTORS

Studies of group behavior offer further insight into the underlying determinants of organizational silence. A well-known social phenomenon that has the deleterious impact of minimizing divergent opinions and assessments among peers is that of conformity. Members of groups also can be subject to a diffusion of responsibility, where roles and responsibilities become blurry and individual accountability becomes diluted. Moreover, variations in the social environments at the unit level in hospitals have led some units to be characterized as microclimates of distrust. Each of these social phenomenon warrant fuller scrutiny.

Conformity

Convincing studies that show individuals will adapt their judgments and beliefs to fit those of people around them can be traced back to the 1950s (Asch 1951, 1955, 1956). The classical research design compared subjects' judgments on a task with and without the presence of other people's judgments. On clearly discernable tasks such as judging the relative lengths of uneven vertical lines, subjects conform to the erroneous judgments of the experimenter's confederates while in the absence of such confederates they offer accurate judgments. One apparent reason people conform to the behaviors and beliefs of others is to gain acceptance in a group or community—especially if the community is composed of experts and there is a knowledge differential between the target person and certain members of the group. Conformity also is abetted when the group is important to the target person and when target persons see themselves as similar (and hence identify more readily) with group members (Aronson 1999).

When physical reality breaks down and becomes ambiguous, social reality becomes very important; that is, we look to others for valuable sources of information and behavioral guidance (Aronson 1999). However, when

social reality breaks down as well or is slow to act, the consequences can be disastrous. Failure to rescue in acute care settings, for example, characterizes breakdowns in both physical and social reality. If no one is attending to a patient's rapidly declining physical condition or making sense of puzzling vital signs, then doing nothing out of the ordinary is the social reality to which other providers will conform. Conforming to what others are doing when they are doing nothing has made rapid response teams a primary patient safety initiative for addressing failure to rescue. It also undermines two hallmarks of high reliability organizations: preoccupation with failure and sensitivity to operations (Weick and Sutcliffe 2001).

How can conformity, when it is undesirable, be reduced? Research suggests that once a single person visibly breaks conformity and offers an alternative point of view, thereby diversifying the information influencing people's evaluations and reducing the pressure to avoid dissent, others are far more likely to follow (Asch 1955; Allen and Levine 1969; Nemeth and Chiles 1988). Piercing the veil of silence may require only one or two individuals to speak up for patient risks to be averted.

Diffusion of Responsibility

Diffusion of responsibility is a characteristic of groups that also can have an impact on organizational silence. Referred to as *social loafing* in the social psychology literature, it is the tendency for people to take on less responsibility when their efforts are pooled in pursuit of a shared goal compared with responsibility on individually assigned tasks (Sweeney 1973; Ingham et al. 1974; Latane, Williams, and Harkins 1979). As the term *loafing* may connote purposeful shirking of responsibility (which may or may not be the case), and diffusion of roles and responsibility (along with some attendant confusion) is more an inherent property of groups, the more neutral term, *diffusion of responsibility*, is used here.

In many clinical settings, it is the responsibility of several providers to care for a patient; however, in the absence of standardized procedures, individual roles and responsibilities are frequently assumed rather than clearly spelled out. Unstated assumptions of individual care providers will undoubtedly vary. Witness the confusion that too commonly occurs when patients transition from one locus of care to another (e.g., OR to ICU; hospital to nursing home). Under conditions of diffused responsibility, components of care that should be attended to are frequently missed. Although care providers may perceive themselves as expending considerable effort as they move about

and track down missing information, they may actually be contributing less than if roles and responsibility were more clearly defined.

Diffusion of responsibility and its adverse consequences can be reduced. When people are made accountable for specifiable actions, they can monitor and self-manage their own performance (Harkins and Jackson 1985). Responsibility should not be so diffused that individuals cannot assess their own performance or change direction when needed. Further research has shown there is less aimless diffusion when tasks are challenging and engaging (Karau and Williams 1993), when group members are friends and on good terms (Davis and Greenless 1992), and when groups are small and formed of similarly competent members (Comer 1995). Many of these characteristics already exist in clinical settings. However, a balanced perspective is needed. Providers cannot be so task-bound that they fail to reevaluate and reprioritize tasks that need to be attended to as patient conditions change. The key point here is when individuals harbor less doubt and are more secure in their own roles, they are more likely to transcend individual concerns and speak up regarding higher-order organizational concerns.

Microclimates of Distrust

There is considerable variation in the social environment of hospital units in ways very much influenced by the leadership style of nurse managers. Within the same organizational context, Edmondson (2004, 1996) has found significant differences in shared beliefs about the consequences of speaking up on sensitive topics like medical error. With some teams, errors were openly acknowledged and discussed so they could be avoided in the future; other teams, however, maintained silence with respect to errors. A microclimate interpretation of these team differences is that teams have acquired different shared underlying assumptions or beliefs as to the appropriate way to perceive, think, and feel about certain issues. These shared underlying assumptions become so well tacitly accepted and of a second nature that they no longer require much thought, as might be evidenced by glib remarks such as "that's the way we do things around here." A key influence or shaper of microsystem climate is the style of leadership at the local level. Edmondson (2004) states it quite nicely:

> Hospital cultures, in short, are patchwork quilts rather than uniform, smooth fabrics where learning culture, or what some have called patient safety culture, is concerned. The variation is primarily driven by local leadership behaviour, which in both overt and subtle ways shapes the climate for learning.

Organizational silence and underreporting of error are likely to flourish in local units when the managers are prone to be blame seeking and attribute error to the individual failings of careless or incompetent staff. Under these leadership conditions, it is suspected that fear of reprisal leads to few errors that get reported. Under leadership conditions where open discussion is encouraged and notions of *just culture* prevail, it is reasonable to expect an increase in reporting of errors. This brings us to an unfortunate irony that can occur in relation to organizational learning. If a hospital's top level leadership is unaware of variations in microclimates and their potential effects on error reporting at the local unit level, it is quite possible they could unwittingly come to value the punitive-low error reporting climates more than the open-high error reporting climates. As noted by Senge (1990), one hallmark of organizational or collective learning is an institution's ability to learn from its own folly. To do this, leaders need to stay close to the action and take heed when things are too silent.

ORGANIZATIONAL FACTORS

Organizations sometimes venture on courses of action or acquire characteristics that are counterproductive to what they would otherwise intend. Three areas of organizational vulnerability that warrant closer attention are unchallenged beliefs, the perceived qualities of the good worker, and understanding the interdependencies of complex systems.

Unchallenged Beliefs

An unwarranted assumption that has led many organizations astray is that of bringing highly qualified and respected experts together to address important problems and automatically expecting good decisions to emerge. While the quality of group decision making indeed can be better than that of individuals acting alone, groups sometimes err in their collective effort to reach consensus and move forward. In their wake, voices that should have been recognized may go unheard. Information that should have been attended to goes unexamined. In brief, group deliberations require skillful management if pitfalls are to be avoided and divergent views are to be aired.

Janis (1972) used the term *groupthink* to refer to the tendency of cohesive, insulated groups working under conditions of directive leadership and high stress to prematurely reach consensus and support the views advocated by the

leader. These groups display a strong *confirmation bias* in that they focus predominately on information that confirms their initial opinions and disregard information that is contrary to prevailing beliefs. Failure to seek disconfirming evidence is a major pitfall. Other characteristics of groupthink include rebuking anyone who speaks up with a different point of view ("we're counting on you to get with the program"), a sense of invulnerability ("we're the greatest"), and simplification of the nature of the problem. Janis cited the Bay of Pigs blunder by Kennedy and his advisors as a prime example of *groupthink*. Made up of America's brightest political minds, this elite group failed because it mismanaged the decision-making process and allowed consensus, loyalty, and silence to be valued more than dissent and an open airing of alternative views.

When forced to make decisions, decision makers frequently select alternatives that justify past decisions, even as evidence mounts that the selected course of action is failing (Staw 1976, 1981). Organizations have been known to continue marginal programs for no other reason than considerable costs, time, and effort have already been invested in the program. It is not uncommon for decision makers to be bound too closely to past decisions and fail to recognize what economists call *sunk costs*—previously incurred costs and investments that are irrecoverable and that should have no bearing on the present decision. If the organizational culture is one that severely punishes decisions that lead to unfavorable outcomes, managers may escalate their support of ineffective programs in the prolonged hope that things will turn around. When individuals find themselves in a hole, the sage advice is to stop digging. One way of doing this is to seek out the views of individuals who have not been involved in the earlier decision making—individuals who have no reason to be committed to earlier decisions.

The Good Provider Fallacy

Anyone familiar with the work that nurses and physicians do in hospitals and other clinical settings cannot help but respect their strong work ethic, personal commitment, compassion, and resourcefulness. Most providers take pride in their individual competence, autonomy, and ability to take decisive action in solving on-the-spot problems. However, as fine as these qualities are, they have an ironic dark side. In a study of hospital work process failures (e.g., missing supplies, malfunctioning equipment, incomplete/inaccurate information, unavailable personnel), Tucker and Edmondson (2003) found that the failures elicited "workarounds" and "quick fixes" by nurses 93 percent of the time and reports of the failure to someone who might be able to do something

about it, 7 percent of the time. Systems experts refer to the quick fix as first-order problem solving and efforts to solve the system-related, problem-behind-the-problem as second-order problem solving. While first-order problem solving satisfies the immediate patient-care need, solely focusing on the first-order problem to the neglect of its contributing causes does nothing to prevent it from reoccurring. And some of the firstorder fixes that are of a "robbing Peter to pay Paul" nature (e.g., snatching supplies from the next unit) may only shift the problem elsewhere in the system.

So what are the qualities of a good provider? Perhaps some additional qualities are needed. To avoid organizational silence and ignorance, institutional leaders and managers may need to change their thinking about what constitutes a good worker. Traditionally managers have coveted workers who take the initiative, who roll with the punches and don't complain, and who pretty much stay in their place. Providers are needed who will help the organization learn. It is time for managers to value providers who ask disruptive, penetrating, or otherwise embarrassing questions without viewing them as trouble-makers or whiners (Tucker and Edmondson 2003; Edmondson 2004; Wears 2004). It is time for managers to value providers who present evidence contrary to the view that things are alright, who create cognitive dissonance that serves as an impetus for change, and who step out of their accustomed roles to help solve the problem-behind-the-problem. And foremost, it is time managers and their leaders to value these same qualities among themselves.

Neglect of the Interdependencies

Higher levels of reliability and organizational learning are not likely to be realized when quick fixes patch over process failures that either escape the attention of managers and leaders or are tacitly condoned. Compared with sharp-end providers, managers and leaders are much better positioned to actually address the problems-behind-the-problems and to be mindful of the interdependencies of care. Because of their positions, they have the opportunity to work across organizational units of care and address the discontinuities. With perhaps a few exceptions, there is very little evidence that leaders actually spend much time on attending to the complex interdependencies of care and areas of vulnerability in their institutions.

Schyve (2005) has noted that systems thinking has not come easy to health care professionals. The dynamic and multiple interdependencies among technology, personnel, work processes, and external influences frequently result in consequences that are unanticipated and unintended.

Health care institutions that are implementing new information technology systems quickly learn that many of the organizational factors that conveniently have been neglected all of a sudden are magnified and take on immediate significance. It is not the technology, but the sociology that sinks well intended implementations (Leavitt 2005). The undesirable consequences of poorly designed technology are exacerbated when they add to the workload of providers who are already understaffed, when the new work processes are poorly conceived and devoid of clinical reality, when production goals continue to create thin margins of safety, and when leadership is aloof and silent.

CONCLUSIONS

A new role for health care leaders and managers is envisioned. It is one that places a high value on understanding system complexity and does not take comfort in organizational silence or in simple explanations. It focuses on the interdependencies and not just the components. It values dissent and multiple perspectives as signs of organizational health, and questions agreement, consensus, and unity when they are too readily achieved. It is a role that is sensitive to the hidden pitfalls of the availability heuristic, self-serving bias, and the status quo. It understands the impact of social factors on group behavior and the potentially harmful consequences of conformity, diffusion of responsibility, and microclimates of distrust. It does not allow prevailing beliefs to go unchallenged, it thinks differently about what it means to be a good provider, and it is mindful of the frequently neglected interdependencies of care. In this new role, leaders recognize that superb technical knowledge and dedication of front-line providers is no match for the toll that flawed and poorly performing interdependent systems of care can take. In brief, leaders must demonstrate a willingness to understand the complexity of the sociotechnical systems of which they are a part and be prepared to break the silence.

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